AIDS

ACQUIRED IMMUNE DEFICIENCY SYNDROME

INFORMATION FOR PHYSICIANS AND HEALTH CARE PROVIDERS

March 1984

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

INFORMATION
ON
ACQUIRED IMMUNE DEFICIENCY SYNDROME
FOR
PHYSICIANS
AND
HEALTH CARE PROVIDERS

Michael S. Dukakis
Governor

John Mudd
Acting Secretary of Human Services

Bailus Walker, Jr., Ph.D, M.P.H.
Commissioner of Public Health

AIDS TASK FORCE

Ballus Walker, Jr., Ph.D., M.P.H.
Chairman, AIDS Task Force
Commissioner
Massachusetts Department of
Public Health
150 Tremont Street, 10th Floor
Boston, MA 02111
(617) 727-2700

Martin S. Hirsch, M.D.
Associate Professor of Medicine
Harvard Medical School
Associate Physician
Massachusetts General Hospital
Fruit Street - Gray Building
Boston, MA 02114
(617) 726-3815

Paul H. Black, M.D.
Chairman and Professor of Microbiology
Professor of Medicine
Research Professor of Surgery
Boston University School of Medicine
80 E. Concord Street
Boston, MA 02118
(617) 247-5000

Peter L. Page, M.D.
Chief Medical Director
American Red Cross Blood Services-
Northeast Region
60 Kendrick Street
Needham, MA 02194
(617) 449-0773

Michael D. Saraco
Massachusetts Health Officers Assoc.
P.O. Box 634
Winchester, MA 01890
(617) 729-8721

Arthur B. Harper, Director
Preventive Health Services
Department of Health & Human Services
JFK Building Room 1401 C-9
Boston, MA 02203
(617) 223-3848

Jerome Groopman, M.D.
Assistant Professor of Medicine
Harvard Medical School
New England Deaconess Hospital
85 Pilgrim Road
Boston, MA 02215
(617) 732-8560

Georgette Jeanty, M.D.
1525 Blue Hill Avenue
Mattapan, MA 02126
(617) 298-0156

Richard Brown, M.D.
Chief, Infectious Disease Service
Baystate Medical Center
759 Chestnut Street
Springfield, MA 01199
(413) 787-5376

John Mazzullo, M.D.
Assistant Clinical Professor of Medicine
Tufts University School of Medicine
New England Medical Center
Box 801, 171 Harrison Avenue
Boston, MA 02111
(617) 956-5480

Anne Marie Silvia
AIDS Coordinator, City of Boston
Department of Health and Hospitals
818 Harrison Avenue
Boston, MA 02118
(617) 424-5916

Representative Thomas J. Vallely
State House Room 540
Boston, MA 02133
(617) 722-2090

Lawrence Kessler
Chairman of AIDS Action Committee
180 Boylston Street, Apt. 19K
Boston, MA 02199
(617) 536-4995

John Sullivan, M.D.
Associate Professor of Pediatrics
University of Massachusetts
Medical School
55 Lake Avenue North
Worcester, MA 01605
(617) 856-3101

Nicholas Flumara, M.D., Director
Division of Communicable/
Venereal Diseases
600 Washington Street
Boston, MA 02111
(617) 727-2686

George Grady, M.D., Director
State Laboratory Institute
305 South Street
Jamaica Plain, MA 02130
(617) 522-3700

AIDS

ACQUIRED IMMUNE DEFICIENCY SYNDROME

During this time of uncertainty regarding the medical dimensions of Acquired Immune Deficiency Syndrome (AIDS), many health care providers have raised questions about the illness and the proper procedures to follow in working with AIDS patients, as well as persons who do not have AIDS but fall into one of the high-risk groups for developing AIDS.

The Massachusetts AIDS Task Force was established by Governor Dukakis and Secretary of Human Services Manuel Carballo in the summer of 1983 to review and assess the state's monitoring, educational, and treatment efforts relating to AIDS. The Task Force and the Massachusetts Department of Public Health are issuing this brochure to assist physicians and health care providers in caring for AIDS patients.

DEFINING AIDS

To date, patients seem to fall into the following categories:

- **Patients with AIDS-Related Complex (ARC),** also referred to as "Pre-AIDS" or Lymphadenopathy Syndrome. Patient may have unexplained fever, weight loss and persistent diarrhea. Significant lymphadenopathy of two noncontinguous extra-inguinal areas is usually present. Evidence of immune suppression characterized by a decrease in white blood cells, decrease in total number of lymphocytes, and decrease in T-cell helper subset with relative increase or decrease in T-cell suppressor subset is present. Patient may be totally asymptomatic or have vague symptoms such as fatigue.

Persons with ARC require close medical follow-up since 5 percent may progress to full-blown AIDS. In addition, many patients who fall into this category may develop psychological difficulties requiring professional support (see Resource List).

- **Patients with Full-Blown AIDS.** These patients are characterized by evidence of acquired immune suppression as described above not secondary to any other illness or treatment known to be associated with immune suppression, plus evidence of an opportunistic infection (an infection by microorganisms that are ordinarily not pathogenic for the host) and/or Kaposi's sarcoma (KS) in a person less than 60 years old.

ETIOLOGY AND PATHOGENESIS

The causes of AIDS are generally unknown, but some hypotheses include:

- **A single agent,** either a variant of a known infectious agent (probably viral) or a new agent that has not been identified. One candidate for this agent is a variant of the human T-cell leukemia virus.

- **Immune overload with multiple infections or foreign antigens.** Such infections could include syphilis, hepatitis B, Epstein-Barr virus (EBV), cytomegalovirus (CMV) or intestinal parasites. Noninfectious sources of antigens could include semen, plasma protein or unknown materials in illicit drugs. Multiple exposures might decrease immune competence and allow opportunistic infections to develop.

- **Other possibilities might include** environmental, toxicological, nutritional or genetic factors.

EPIDEMIOLOGY

To date, 75 percent of AIDS cases have been homosexual or bisexual males, and 20 percent have been intravenous drug users. The rest of the cases have involved hemophiliacs, Haitians who have recently come to the United States, heterosexual females with sexual partners in high-risk groups, and infants of mothers in high-risk groups. A very small number of cases have involved persons who had previously received a blood transfusion. No epidemiological evidence indicates that health care workers are at greater risk of contracting AIDS as a result of direct patient care.

The largest numbers of cases have been reported in the New York City area and in California. Significant numbers of cases have also been diagnosed in Chicago, Miami, Houston, Atlanta and Boston.

The disease seems to follow the epidemiological pattern of hepatitis B, which is largely transmitted through blood. The role of blood in the transmission of AIDS, however, is still not completely understood.

A multitude of opportunistic infections affect patients with AIDS. The following list is representative, but not exhaustive:

- *Pneumocystis carinii* pneumonia — a protozoan infection
- Disseminated *candida* — a yeast infection
- Disseminated *toxoplasmosis* — a protozoan infection
- *Cryptosporidiosis* — a protozoan infection
- *Mycobacterium* - both human and *avian-intercellulare* — a bacterial infection

SIGNS AND SYMPTOMS

In identifying AIDS or Pre-AIDS patients, practitioners should look for the following:

- Persistent fatigue
- Unintentional weight loss greater than 10 percent of body weight
- Persistent unexplained fever
- Persistent diarrhea
- Signs of Kaposi's sarcoma, such as purple nodules, reddish-purple plaques, especially in extremities
- Lymphadenopathy (swollen glands)
- Dyspnea
- Dry cough
- Changes in mental status, especially depression
- Other signs and symptoms of various opportunistic infections

It is important to realize that not all patients in high-risk groups presenting with signs and symptoms of AIDS/ARC have these diseases. Health care providers should guard against premature diagnosis and concommitant stigmatization.

DIFFERENTIAL DIAGNOSIS OF AIDS/ARC

1. CMV or EBV mononucleosis
2. Hodgkin's disease and non-Hodgkin's lymphoma (or other malignancy)
3. Other overwhelming infections with a viral, bacterial or protozoal agent
4. Other causes of immune suppression, especially cytotoxic drugs and corticosteroids
5. Tuberculosis and other disseminated infections
6. Collagen-vascular diseases

DIAGNOSIS

When a patient presents with signs and symptoms of AIDS/ARC, it is necessary to take a careful history, including a sexual history, and to do a thorough physical examination and laboratory evaluation.

Determining if a Patient is in a High-Risk Group

It may be necessary for a practitioner to determine the sexual orientation of a person seeking medical care to determine whether he or she is at high risk of developing AIDS. To do this is often very difficult for both the health care provider and the person seeking medical attention. Sensitivity, based upon knowledge, is the key, particularly in dealing with an area as personal and private as one's sexual behavior.

Such information is best obtained from the patient in a manner that is not threatening, authoritarian or moralistic. It goes without saying that appearance and mannerism are inaccurate bases for determining sexual orientation, and the medical professional conducting the interview must be aware of stereotypic prejudice.

One technique for gathering such information that has been successfully employed involves an introductory statement of explanation and three questions. The following is proposed as a guideline:

"It may not seem obvious to you why I need to ask you about your sexuality, but there are some diseases that are contracted through bodily fluids. To help me in treating you, I need to ask you a few questions."

1. "Are you sexually active?"

If sexually active:

2. "Are you sexually active with men, women, or both?"
3. "Is this information socially know?"

These questions will enable the medical practitioner to determine if the male patient is either gay or bisexual and if the individual is "out of the closet." If the patient is gay or bisexual and willing to discuss the matter, his relative risk can be assessed by asking if he has had multiple sexual partners and has engaged in certain kinds of sexual practices.

If it is important to gather more specific information about a Haitian who is seeking medical attention, the information is best obtained with the help of a translator who speaks Creole (see Resource List). Once again, explaining to the patient, in a non-threatening manner, why the questions are being asked may alleviate anxiety and facilitates securing accurate information.

Finally, in gathering information from someone who may be an intravenous drug user, the following questions are suggested: "Do you use recreational drugs?" If so, "Do you ever shoot up?" Since use of such drugs is illegal, it may be appropriate to emphasize the confidential nature of the patient/physician relationship.

Appropriate Laboratory Tests

The following laboratory tests should be carried out as appropriate for individual patients showing signs and symptoms of AIDS or ARC. **NO ONE TEST IS DIAGNOSTIC FOR AIDS.**

- CBC with differential and ESR
- Chest x-ray
- PPD skin test with a control for anergy
- Immunoglobulins
- Liver function tests

A consultation with and/or referral to a specialist of infectious diseases, pulmonary medicine or hematology-oncology (see Referral Procedure below) is indicated if the initial examination and laboratory findings are suggestive of AIDS or if the physician is uncomfortable in dealing with high-risk individuals.

RECOMMENDED REFERRAL PROCEDURES

AIDS is a severe disease by its very nature. Treatment is not clearly understood. Several experimental treatment protocols to evaluate appropriate therapy are available in the state. It is important to make a diagnosis as quickly as possible and institute the most up-to-date therapy. It is recommended that providers contact one of the members of the AIDS Task Force for advice and/or referral (see Task Force Membership List).

TREATMENT

There is currently no treatment for the underlying immune deficit that occurs in AIDS and ARC patients. The use of interferons and interleukin II, however, looks promising for opportunistic infections and especially for Kaposi's sarcoma.

Practitioners should provide support for the patient, his/her sexual partner(s), family and friends. Sexual partner(s), in particular, require close medical and psychological follow-up (see Resource List).

Infection control should be followed by using the hepatitis B model (see Bibliography).

PROGNOSIS

The prognosis for patients with confirmed AIDS is poor, while little is known as of now about AIDS Related Complex. Patients with Kaposi's sarcoma treated with interferons have experienced a 30 to 40 percent survival rate for two years. Unfortunately, the mortality rate for patients with opportunistic infections is as high as 70 to 80 percent over two years.

REPORTING SUSPECTED CASES OF AIDS

Reporting of AIDS cases to the Massachusetts Department of Public Health was made mandatory on November 10, 1983. AIDS will be reported directly to the State Health Departments as a special disease on Centers for Disease Control forms, which may be obtained from:

Massachusetts Department of Public Health
Division of Communicable/Venereal Diseases
600 Washington Street, Room 606
Boston, MA 02111
(617) 727-2686

RESOURCES FOR FURTHER INFORMATION

Massachusetts AIDS Task Force
Department of Public Health
150 Tremont Street
Boston, MA 02111
(617) 727-2700

Established by Governor Dukakis and Human Services Secretary Manual Carballo in the summer of 1983 to review and assess the state's monitoring, educational, and treatment efforts relating to AIDS.

Division of Communicable and Venereal Diseases
Department of Public Health
600 Washington Street - Room 606
Boston, MA 02111
(617) 727-2686

Office to which all cases of AIDS must be reported. Conducts epidemiologic investigations of all reported cases and forwards its data to the U.S. Centers for Disease Control in Atlanta, where research is ongoing. Also provides training and education for health professionals on AIDS.

AIDS Action Committee
16 Haviland Street
Boston, MA 02115
(617) 267-7573

Education and support group for people with AIDS, their families, lovers, friends, and health care providers. Bereavement support groups for those having lost someone to AIDS. Provides speakers, conducts forums, and offers rap groups, hospice-trained volunteers, hotline information and referrals. Provides access to free wills and power-of-attorney documents for people with AIDS. Associated with the Fenway Community Health Center.

AIDS Action Line
(617) 536-7733

AIDS Action Committee service, providing information, referrals, and support about AIDS. Fifty trained volunteers, 3:00 - 9:00 p.m.

AIDS Hotline
(617) 424-5916

The Community Infectious Diseases Epidemiology Program of the City of Boston. Staff of public health nurses answers questions about AIDS and makes referrals 8:30 a.m. - 4:30 p.m.

Fenway Community Health Center
16 Haviland Street
Boston, MA 02115
(617) 267-7573

Hotline information, medical work-ups, diagnosis, referrals, counseling. A health care facility sensitive to gays. Participates in research efforts.

Haitian Committee on AIDS in Massachusetts
177 Harvard Street
Dorchester, MA 02124
(617) 436-2848

Provides information, referrals, support, and emergency assistance to Haitian victims of AIDS and their families.

Mayor's Liaison to the Gay Community
Boston City Hall
Boston, MA 02201
(617) 725-4000

Coordinates Mayor's Committee on AIDS, distributes AIDS brochures. Serves as media contact, and provides referrals.

NGTF AIDS Hotline
1-800-221-7044

Toll-free national hotline run by the National Gay Task Force to provide information and referrals.

Springfield Downtown Ministry Council of Churches
293 Bridge Street - Room 205
Springfield, MA 01103
(413) 737-4125

Counseling and referrals.

Public Health Service Hotline
1-800-342-AIDS

Recorded message on AIDS for the general public available from 8:30 a.m. to 5:30 p.m.

Office of Public Affairs
U.S. Public Health Service
Room 721-H
200 Independence Avenue, S.W.
Washington, D.C. 20201
(202) 245-6867

Provides AIDS information bulletin and periodic updates on AIDS for lay and professional public.

American Red Cross Blood Services
- Northeast Region
60 Kendrick Square
Needham, MA 02194
(617) 449-0773

Develops procedures to discourage persons at risk for AIDS, no matter how little the risk, from donating blood. Provides information concerning criteria for blood donors eligibility and indications for transfusion. Works with local hemophilia associations. Also resource for information concerning AIDS, hemophilia, and transfusions.

BIBLIOGRAPHY

American Medical Association (AMA) Council on Scientific Affairs. Health Care Needs of Homosexual Population. J A M A 1982; 258:736-9.

Conte J E Jr et al. Infection Control Guidelines for Patients with the Acquired Immunodeficiency Syndrome (AIDS). N Engl J Med 1983; 309:740-4.

Curran JW. AIDS - Two Years Later. N Engl J Med 1983; 309:609-11.

Gottlieb M S et al. Pneumocystis Carinii Pneumonia and Mucosal Candidasis in Previously Healthy Homosexual Men - Evidence of a New Acquired Cellular Immunodeficiency. N Engl J Med 1981; 305:1425-31.

Information for Prospective Blood Donors. American Red Cross Blood Services - Northeast Region. 1983. Boston.

Masur H et al. An Outbreak of Community - Acquired Pneumocystis Carinii Pneumonia: Initial Manifestation of Cellular Immune Dysfunction. N Engl J Med 1981; 305:1431-8.

Mildvan D et al. Opportunistic Infections and Immune Deficiency in Homosexual Men. Ann Intern Med 1982; 96:700-4.

National Case - Control Study of Kaposi's Sarcoma and Pneumocystis Carinii Pneumonia in Homosexual Men - Part 1 Epidemiologic Results. Ann Intern Med 1983; 99:145-51.

National Case - Control Study of Kaposi's Sarcoma and Pneumocystis Carinii Pneumonia in Homosexual Men - Part 2 Laboratory Results. Ann Intern Med 1983; 99:151-8.

The Acquired Immunodeficiency Syndrome. UCLA Conference, Ann Intern Med 1983; 99:208-20.

AIDS Task Force
Massachusetts Department of Public Health
150 Tremont Street
Boston, MA 02111